#### Statement

of

# U.S. Representative Gene Taylor Fourth District, Mississippi

before the

# Financial Services Committee Subcommittee on Oversight and Investigations

regarding

# **Insurance Claims Payment Processes on the Gulf Coast**

### February 28, 2007

Thank you, Chairman Watt, for conducting this hearing and opening an investigation of insurance fraud after Hurricane Katrina. I am very grateful to you, Chairman Frank, and Chairwoman Waters for hearing my concerns and agreeing to pursue these important matters within the Financial Services Committee.

I will summarize my statement, but, if there are no objections, I would like to submit my full written statement for the record, to include copies of insurance documents and fraudulent engineering reports. These are samples of a much larger problem. I have additional documents on my website and will be happy to provide them to the committee.

After Katrina, several insurance companies conspired with engineering and adjusting firms to commit fraud against their policyholders and federal taxpayers.

Company officials instructed adjusters to assign all damages to the federally-backed National Flood Insurance Program in cases where wind caused much of the damage.

Engineering firms cherry-picked data and manipulated evidence to favor insurance companies.

Insurance, engineering, and adjusting company managers, who never laid eyes on the damaged properties, reversed the observations and conclusions of the engineers who conducted on-site damage assessments.

In light of these facts, I respectfully request that the Financial Services Committee take action on three specific issues, all of which fall under the Committee's jurisdiction.

First, I ask the subcommittee to conduct a <u>full</u> investigation of the fraud against consumers and taxpayers so that the responsible parties can be held accountable for their actions.

Second, I look forward to working with you on a flood insurance reform bill to eliminate the conflict of interest that currently allows insurance companies to defraud U.S. taxpayers. To such ends, Congress should prohibit any company that participates in the

flood program from using anti-concurrent causation language to underhandedly bill taxpayers for wind damage.

Third, I urge the Committee's consideration of H.R. 920, the *Multiple Peril Insurance*Act. This bill – cosponsored by both Democrats and Republicans – would create a new option within the flood insurance program to allow property owners to purchase wind and flood coverage in one single policy.

As you know, the flood insurance program contracts with insurance companies to allow the companies to sell flood policies, which are guaranteed in turn by the federal government. The so-called "Write Your Own" Companies also agree to adjust the flood claims. As a cost-saving measure, NFIP allows the company to use a single adjuster for both claims. Any person with a shred of common sense can tell you that this practice creates an obvious conflict of interest. The current arrangement presents insurance companies with an easy opportunity to manipulate claims in order to bill the federal government and save insurance companies and their shareholders a great deal of money.

The contract between the insurance company and the flood insurance program requires the company to represent the interests of the federal government <u>and</u> its own interests when adjusting claims. The federal regulations state explicitly that "the primary relationship between the Write Your Own Company and the Federal Government will be one of a fiduciary nature, i.e., to assure that any taxpayer funds are accounted for and appropriately expended." (44 CFR 62.23(f))

The federal regulations also state that "the entire responsibility for providing a proper adjustment for both combined wind and water claims and flood-alone claims is the responsibility of the Write Your Own Company." (44 CFR 62.23(i)(1))

Some insurance companies did not act in good faith to fulfill their fiduciary duty to federal taxpayers when adjusting combined wind and water claims after Hurricane Katrina. State Farm, Allstate, Nationwide, USAA, and other insurers adopted procedures that, *a priori*, attributed all damage in the surge area to flooding and then forced homeowners to prove otherwise.

Mississippi Insurance Commissioner George Dale issued a bulletin one week after Katrina, declaring that the insurance companies had to pay wind claims unless they could prove that flooding was the cause. The companies ignored the bulletin, and the state did nothing to enforce it. As a result, thousands of Mississippians had no choice but to sue to get their insurance companies to honor their contracts. Mississippi Attorney General Jim Hood also filed suit and began a state investigation.

Seventeen months after Katrina, U.S. District Judge L.T. Senter, Jr. affirmed in *Broussard v. State Farm* that the insurance companies have the burden of proof. State Farm had not proven its case. In response, the company ran to the *Wall Street Journal* editorial board and claimed that this was a radical ruling. In reality, insurance companies have always had the burden of proof when denying a claim, be it in Mississippi or any other state.

While several companies denied claims for wind damages inside the surge zone, State Farm was the most aggressive in its efforts to defraud their policyholders, using a network of selected contractors to act as accomplices.

On September 13, 2005 – two weeks after Katrina hit Mississippi – State Farm issued a directive from its headquarters in Bloomington, Illinois in a document titled "Wind-Water Claim Handling Protocol." The Wind-Water Protocol instructed State Farm adjusters that "[W]here wind acts concurrently with flooding to cause damage to the insured property, coverage for the loss exists only under flood coverage, if available."

In effect, the Wind-Water Protocol declared that State Farm's wind insurance would not pay for damage caused by wind when they could blame any amount of damage on flooding. Where wind and water both caused damage, adjusters were directed to bill the federal government and, by extension, taxpayers for the full loss if the property was covered by flood insurance.

State Farm's so called "anti-concurrent causation clause" should be called what it really is — a concurrent fraud clause. Its purpose is to cheat both policyholders and taxpayers at the same time. Any attempt to enforce this clause is a bad faith violation of the company's fiduciary duty to federal taxpayers under its contract with the National Flood Insurance Program.

State Farm will argue that it paid more than \$1 billion in Katrina claims in Mississippi and settled more than 95% of its claims. Those numbers only help to prove the fraud that they categorically deny.

State Farm and other insurers paid wind claims in all 82 counties in Mississippi, as far as 300 miles inland. According to the insurance industry's own data, Katrina's winds caused billions of dollars of structural damage far beyond the storm surge area. Yet, near the coastline, where the strongest hurricane winds pounded homes for four to five hours before the storm surge, insurance companies manipulated the adjustment process to deny wind claims.

I urge the subcommittee to seek the testimony of Cori and Kerri Rigsby. The Rigsby sisters were claims adjusters working for E.A. Renfroe and Company. Renfroe worked exclusively for State Farm. The sisters were disturbed by the fraud being committed by State Farm and Renfroe officials, so they copied incriminating documents and gave them to federal and state law enforcement officials. The Scruggs Law Firm represents the sisters in a *False Claims Act* filing against State Farm and Renfroe. That federal fraud case is still active.

In response, Renfroe filed a retaliatory suit against the Rigsby sisters and obtained an injunction that required the sisters to return the copies of documents they provided to state and federal investigators. Because of the Renfroe suit, the only documents currently available to the public are those that are included in the *False Claims Act* filing.

These documents clearly demonstrate that Renfroe and State Farm covered up engineering reports that concluded – in the most explicit terms – that damage was caused by wind. Claims managers who never laid eyes on the damaged properties pressured engineers to revise their observations and conclusions. In some cases, claims managers sent a second engineer to write a report more favorable to State Farm.

The Rigsby sisters photocopied an engineering report with a handwritten note attached that said, "Put in Wind file – DO NOT Pay Bill. DO NOT discuss." That report concluded that first floor damage had been caused primarily by wind. State Farm hid that report and ordered a second report. The second engineer blamed the damage on flooding.

The Rigsby sisters report that, within days after Katrina, State Farm coached its adjusters to pay the policy limits on flood insurance without a site inspection or an engineering report. In sharp contrast, State Farm required an engineering report before paying any wind claims.

Each engineering firm was provided with an analysis by Haag Engineering of Dallas. State Farm and Haag have a long history together that includes bad faith judgments in the courts of several states. Most recently, State Farm, Haag, and Renfroe were found to have acted in bad faith to deny coverage of tornados in Oklahoma in 1999. Because of that verdict and the many complaints about Haag after Katrina, State Farm has been forced to temporarily suspend working with Haag.

Haag's Katrina report makes the ridiculous claims that the NOAA Hurricane Research Division overestimated the wind speeds by 25 percent, and that the U.S. Navy Meteorology and Oceanography Command missed the timing of the storm surge by one hour. Haag based its flawed conclusions on inland wind data because wind towers on the Mississippi Gulf Coast were knocked out by high winds. The Navy spent more than a month analyzing all available weather and ocean data to recreate Katrina's surge, but Haag dismissed the Navy's findings based on an amateur video filmed from a hotel parking garage.

Rimkus Consulting Group of Houston also investigated wind claims for State Farm and other insurance companies. Rimkus established an office in Ridgeland, Mississippi, near Jackson, about 150 miles inland. Rimkus engineers would conduct on-site assessments and email their reports to Ridgeland.

The Merlin Law Group has documented several cases in which the engineer who inspected the home site concluded that damage was caused by wind, but Rimkus staff in Ridgeland changed the observations and altered the conclusions in the reports without the knowledge or consent of the engineers who saw the properties first-hand. A few of the affected homeowners are here today to offer their accounts of Rimkus' fraudulent practices.

I encourage you to invite testimony from the engineers whose reports were revised without their consent. I have attached two Rimkus cases to my statement, but there are

several more on my website. These are only a few of the cases that clearly document the pervasive fraud perpetrated on homeowners and U.S. taxpayers alike. There are many more cases where the adjustment process was manipulated to defraud policyholders, but the fraud cannot be documented at this time.

Again, I thank you for holding this hearing and initiating this investigation. I look forward to working with you to ensure that consumers and taxpayers are protected from these fraudulent insurance practices in future disasters.

## Supplemental Materials to Testimony of Rep. Gene Taylor

### Committee on Financial Services

## Subcommittee on Oversight and Investigations

## February 28, 2007

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Date:

September 13, 2005

To:

State Farm Claim Associates handling CAT PL in the Central and

Southern Zones

From:

Property and Casualty Claim Consulting Services

Subject:

Wind/Water Claim Handling Protocol

#### 

#### Summary

Because of the combination of wind and water damages many homes sustained from Hurricane Katrina, the following materials have been developed and are intended for use as a guide for handling various wind and/or water claims in Louisiana, Mississippi and Alabama.

#### Action

The protocol below outlines the process that should be used for determination of coverage in those locations.

#### **Protocol Detail**

Each claim should be handled on its merits. A causation investigation should be conducted and appropriate claim file documentation is required. Any available information should be considered in making a coverage determination. This information will include, but is not limited to:

- Evidence gathered at the on site inspection. This includes documentation of physical evidence such as water lines, an examination of the debris, and an analysis of the physical damage to the structure.
- Evidence gathered at neighboring locations.
- · Data obtained from reports describing damage to the area.
- · Information from witnesses and policyholders.
- Input from experts that may be retained to provide guidance.

The damage to insured properties will fall into the following categories and should be handled as detailed below:

- Damage to the property was caused by windstorm.
- Damage to separate portions of the property can be attributed to either windstorm or excluded water.
- Damage to the property was caused by excluded water; with no available coverage.
- Damage to the property was caused by flood waters; covered by an available flood policy.



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State Farm Wind-Water Protocol

Damage Caused by Windstorm

When the investigation indicates that the damage was caused by windstorm, the claim will be handled under the applicable provisions of the involved property policy. Consideration should be given to determine if a hurricane deductible or a windstorm or hail exclusion endorsement is involved and the claim handled accordingly.

Damage to Separate Portions with Distinguishable Wind or Excluded Water
Each type of damage should be documented in the claim file. The claim representative
should calculate the separate damage attributable to each peril and handle the
adjustment accordingly. In those cases where the policyholder has policies for both a
windstorm and a flood, payments should be issued under the applicable policy.

Damage Caused by Excluded Water

When the investigation indicates that the damage was caused by excluded water and the claim investigation does not reveal independent windstorm damage to separate portions of the property, there is no coverage available under the homeowners policy pursuant to the following language in Section 1 Losses Not Insured:

"2. We do not insure under any coverage for any loss which would not have occurred in the absence of one or more of the following excluded events. We do not insure for such loss regardless of; (a) the cause of the excluded event; or (b) other causes of the loss; or (c) whether other causes acted concurrently or in any sequence with the excluded event to produce the loss; or (d) whether the event occurs suddenly or gradually, involves isolated or widespread damage, arises from natural or external forces, or occurs as a result to any combination of these:

c. Water Damage, meaning:

(1) flood, surface water, waves, tidal water, tsunami, seiche, overflow of a body of water, or spray from any of these, all whether driven by wind or not . . ."

Other Losses Not Insured may be applicable, including 2.c.(2) & (3), 3.(a), (b) & (c).

Damage to Property Caused by Flood Waters with available Flood Policy Where wind acts concurrently with flooding to cause damage to the insured property, coverage for the loss exists only under flood coverage, if available. The flood damage claim should be handled consistent with the terms of the flood policy providing coverage as outlined in Operation Guide 71-06.

Claims where the causation investigation is ongoing

Payment can be made under a reservation of rights for ALE or Loss of Income under the property policy until the final coverage decision is made. The policyholder should be advised in writing that:

· The investigation is ongoing.

No coverage decision has been made.

- In the event it is determined that there is no covered damage, no further payment will be made on ALE or Loss of Income.
- They may undertake an independent investigation.

All claims in this category must be reviewed by the Claim Team Manager before a final decision is made. Management should be involved in any claim where it is deemed necessary to retain an expert to assist in the determination of causation.

#### For More Information

Any question on this protocol should be directed to your Claim Team Manager.

C. P & C Claims Executive
Southern Zone Executive & Claim Managers
Central Zone Executive & Claim Managers
P & C Claims Directors and Consultants
Catastrophe Services Claim Managers
Catastrophe Services Section & Team Managers
Zone Section Managers

October 12, 2005

State Farm Insurance Mr. Cody Perry, Claims Adjuster 1909 East Pass Rd. Gulfport, MS 39507

Hurricane Damage Assessment Investigation

Insured: Thomas & Pamela Mcintosh

Date of Loss: 8-29-2005

SF Claim No. 24-Z178-602/24-BX-4847-7

FAEC Case No: 530-0088-05-25

Dear Mr. Perry,

Forensic Analysis & Engineering (FAEC) is pleased to provide the following report of our engineering investigation and evaluation of the reported damage to the residence located at 2558 S. Shore Drive in Biloxi, MS.

We initially received this assignment on October 4, 2005. FAEC performed a field assignment investigation of the subject insured residence porch to the we we

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SITE CODERVATIONS

The following are the observations made during FAEC's inspection of the structure:

The home has a north-south orientation with the front of the house facing east to South Shore Dr. The home is on a waterfront lot on the Tchautacabouffa River.

# FORENSIC ANALYSIS & ENGINEERING CORPORATION

ESTABLISHED 1966

FORENSIC ENGINEERING, PRODUCT DEFECT ANALYSIS & ACCIDENT INVESTIGATIONS

5301 Capital Blvd., Suite A - Raleigh, North Carolina 27616-2956

WEBSITE: WWW.FORENSIC-ANALYSIS.com E-MAIL: FORENSIC @ FORENSIC-ANALYSIS.com phone: (919) 872<sub>4</sub>8788



Title: Hurricane Damage Assessment Investigation Insured: Thomas & Pamela McIntosh Claim/Policy No.: 24-Z178-602/24-BX-4847-7

FAEC File No.: 530-0088-05-25

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- The first floor elevation is approximately 20-21 feet. The watermark line in the house is approximately five and one-half feet above the main floor interior flooring.
- The roof was damaged at the peak and right front sections. Ceilings were damaged.
- The doors and windows were all missing.
- All debris had been cleaned out of the house.
- According to Mr. McIntosh, a neighbor Mr. Mike Church reported that houses were blown apart and debris was thrown into the McIntosh house at approximately 8 AM and the floodwater began rising at 11 AM.
- The lower front right corner of the house wall was missing approximately three studs.
- The back porch had a wooden deck and arbor destroyed.
- An outdoor metal storage shed was missing.
- The detached carport originally had nine columns. Several of these were found severely damaged.
- Large oak trees were felled in a northwesterly direction. Limbs of a live oak tree in the backyard of the subject residence had fallen.
- Observations of the area are consistent with the findings of this property. There were numerous tall tree failures in the northwesterly direction.

### **CONCLUSIONS**

Based upon the information that has been presented to FAEC and evidence gleaned during our inspection, FORENSIC ANALYSIS & ENGINEERING CORPORATION has made the following conclusion concerning the damage to the structure.

- The tree failures in the northwesterly direction are the result of the winds out of the southeast from the approaching hurricane.
- The roof, door, carport, and window damage was caused by wind and wind driven debris.



Title: Hurricane Damage Assessment Investigation Insured: Thomas & Pamela McIntosh Claim/Policy No.: 24-Z178-602/24-BX-4847-7

FAEC File No.: 530-0088-05-25

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It is FAEC's opinion that the interior damage of the structure is primarily the result of the failure of the windows, walls, and doors due to wind.

The conclusions and opinions presented in this report are based on the results of FAEC's field investigation of the subject residence, as well as our analysis of the available wind and localized water level data and upon all of the other associated information that we have gathered during the course of our investigation efforts to date. If additional information or facts become available which materially affect these stated conclusions and opinions, then, FAEC reserves the right to amend or change its opinions and conclusions as needed.

t has been our pleasure to perform this structural engineering analysis for you. We trust that our efforts will meet with your approval and that this report meets its intended purpose. Please call if you have any questions concerning this report or if I or any of FORENSIC ANALYSIS & ENGINEERING CORPORATION'S staff can be of further support.

Respectfully submitted,

FORENSIC ANALYSIS & ENGINEERING CORPORATION

Brian Ford, P.E.

Senior Principal Structural Engineer Mississippi P.E. License No. 08770

As it is the practice of FAEC to emphasize and ensure the technical quality of its work through peer review, the content of this report has been reviewed by the undersigned to ensure that all stated conclusions and supporting facts are technically consistent and meet the requirements of current engineering and scientific principles.

FORENSIC ANALYSIS & ENGINEERING CORPORATION

bed K. Kochan Resident

Robert K. Kochan, ME, DABFET, FACFEI

Principal Technical Consultant

October 20, 2005

State Farm Insurance Mr. Cody Perry, Claims Adjuster 1909 East Pass Rd. Gulfport, MS 39507

Re:

Hurricane Damage Assessment Investigation

Insured: Thomas & Pamela McIntosh

Date of Loss: 8-29-2005

SF Claim No. 24-Z178-602/24-BX-4847-7

FAEC Case No: 530-0088-05-25

Dear Mr. Perry,

Forensic Analysis & Engineering (FAEC) is pleased to provide the following report of our engineering investigation and evaluation of the reported damage to the residence located at 2558 S. Shore Drive in Biloxi, MS.

We initially received this assignment on October 4, 2005. FAEC performed a field investigation of the subject insured residence on October 18, 2005. In this assignment we were tasked to inspect the damage to the left front wall from the front porch to the dining area and determine if it was from wind, water or both.

This summary report is being submitted in fulfillment of our assignment in this matter.

#### BACKGROUND

On the morning of August 29, 2005, the Mississippi coast, including the city of Biloxi, was impacted by Hurricane Katrina, which was classified as a Category-4 hurricane when it made landfall.

FAEC performed a field investigation of the subject residence to determine if the damage to the front wall of the residence was caused by wind, floodwater or a combination of both. Mr. McIntosh was present during FAEC's inspection. During our on site examination of the subject damage, FAEC was able to complete our inspection.

#### SITE OBSERVATIONS

The following are observations made during FAEC's inspection of the structure:

The home is oriented so that the front faces east towards S. Shore Dr. The back yard abuts Big Lake at the south end of the Tchoutacabouffa River.

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FORENSIC ENGINEERING, PRODUCT DEFECT ANALYSIS & ACCIDENT INVESTIGATIONS

5301 Capital Blvd., Suite A - Raleigh, North Carolina 27616-2956

E-MAIL: FORENSIC @ FORENSIC-ANALYSIS.com website: www.FORENSIC-ANALYSIS.com
Telephone: (9,19) 873-8788 (800) 224,3595 Facsimile (919) 872-8660

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Title: Hurricane Damage Assessment Investigation Insured: Thomas & Pamela McIntosh Claim/Policy No.: 24-Z178-602/24-BX-4847-7

FAEC File No.: 530-0088-05-25

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- There appears to be roof damage to the peak, north side and the southwest ridge area. The extent of this damage was not discernable as those areas had "Blue Roof" tarps covering them.
- The damage on the second floor consists primarily of floor damage.
- The damage to the first floor is extensive and includes floor, wall and ceiling damage.
- A witness, Mr. Craig Robertson, who is the owner's yardman, was at the site doing clean up work. He stated that prior to the storm he assisted in placing protective measures over the windows for the owners. He stated that shortly after the storm, he was at the house and had found that some of the upstairs doors, which led out to a balcony, had blown open and allowed water to enter the second floor which damaged the floor and ceiling below. Observations were consistent with his statement.
- There were abrasion marks on a decorative column and the inside of French doors that lead from the dining room of the first floor out to the front porch. When Mr. Robertson was questioned on the cause of these, he was unsure, but stated that there was a brick wall on the south end of that room that had blown into the house and there was lumber in that room after the storm. He also commented that part of a neighbor's roof from across the cul-de-sac was in front of the carport, which was immediately south of the subject residence and outside of the mentioned brick wall. He mentioned that another part of that roof was in front of the north end of the porch. Observations of the exterior porch columns, which also show signs of abrasion for a distance of about 4 ft. above the porch floor. This again is consistent with part of a roof structure rubbing against the columns while being carried by water. At the point where it was said that the debris stopped (north end of porch) several trees showed abrasion marks similar to the porch columns.
- The first floor elevation is estimated to be between 15 and 20 feet. Exact information was not available.
- Mr. Mindy Briscoe, the neighbor to the north of the subject house, stated that he had about 2-feet of water in his house. His floor elevation appears to be about 2 ft. higher than the subject house which would indicate that the water level in the subject house approached 4 ft above the first floor. An observation of light debris in nearby trees was consistent with this estimate of water level.
- The windows and doors at the back or west side of the house were not present.
  Their condition after the storm was not determined.



Title: Hurricane Damage Assessment Investigation

Insured: Thomas & Pameia McIntosh Claim/Policy No.: 24-Z178-602/24-BX-4847-7

FAEC File No.: 530-0088-05-25

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 Observations of nearby properties indicate significant damage and there were numerous tree failures in the northwesterly direction.

#### CONCLUSIONS

Based on the information that has been presented to FAEC and evidence gleaned during our inspection, FORENSIC ANALYSIS & ENGINEERING CORPORATION has made the following conclusions concerning the damage to the structure:

- The tree failures in the northwesterly direction are the result of the winds out of the southeast from the approaching hurricane.
- There appears to have been damage to the structure by wind as evidenced by
  missing shingles on parts of the roof structure. Damage to the second story floor
  and first floor ceilings was predominately caused by wind and intruding rainwater.
- The damage to the first floor walls and floors appears to be predominately caused by rising water from the storm surge and waves.

House plans were not made available as to the construction of the left corner wall (entry from porch to the dining room). This corner has two walls. The east wall remains with French doors to the porch. The south wall was stated to be brick and it is unknown if doors were in that wall. The east doors would receive some protection from floating debris by the porch columns. It is understood that some lumber came in through the south wall into the dining room and that the bricks had fallen into the room. It is the opinion of FAEC that the damage to this wall was predominately due to waterborne debris hitting the wall.

The conclusions and opinions presented in this report are based on the results of FAEC's field investigation of the subject residence, as well as our analysis of the available wind and localized water level data and upon all of the other associated information that we have gathered during the course of our investigation efforts to date. If additional information or facts become available which materially affect these stated conclusions and opinions, then, FAEC reserves the right to amend or change its opinions and conclusions as needed.



Title: Hurricane Damage Assessment Investigation

Insured: Thomas & Pamela McIntosh Claim/Policy No.: 24-Z178-602/24-BX-4847-7

FAEC File No.: 530-0088-05-25

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It has been our pleasure to perform this structural engineering analysis for you. We trust that our efforts will meet with your approval and that this report meets its intended purpose. Please call if you have any questions concerning this report or if I or any of FORENSIC ANALYSIS & ENGINEERING CORPORATION'S staff can be of further support.

Respectfully submitted, FORENSIC ANALYSIS & ENGINEERING CORPORATION

John B. Kelly, P.E.

Principal Structural Engineer

n B. Kelly

As it is the practice of FAEC to emphasize and ensure the technical quality of its work through peer review, the content of this report has been reviewed by the undersigned to ensure that all stated conclusions and supporting facts are technically consistent and meet the requirements of current engineering and scientific principles.

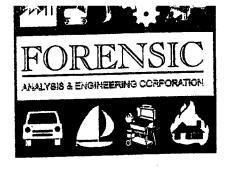
FORENSIC ANALYSIS & ENGINEERING CORPORATION

Robert K. Kochan, ME, DABFET, FACFEI

Principal Technical Consultant

November 21, 2005

State Farm Insurance Mr. Clark Martin, Claims Adjuster 1909 East Pass Rd. Gulfport, MS 39507



Re:

Hurricane Damage Assessment Investigation

Insured: Mr. Minh Nguyen Date of Loss: 8-29-2005

SF Claim No. 24-Z451-170/24-CC-2102-7

FAEC Case No: 530-0091-05-25

DEC 01 2005

Dear Mr. Martin,

Forensic Analysis & Engineering (FAEC) is pleased to provide the following report of our engineering investigation and evaluation of the reported damage to the subject residence located at 6613 Sundown Avenue in Biloxi, MS.

We initially received this assignment on October 4, 2005. FAEC performed a field investigation of the subject insured residence on October 25, 2005. In this assignment we were tasked to inspect the subject home to determine if wind or tidal surge damaged the residence.

This summary report is being submitted in fulfillment of our assignment in this matter.

#### **BACKGROUND**

On the morning of August 29, 2005, the Mississippi coast, including the city of Biloxi, was impacted by Hurricane Katrina, which was classified as a Category-4 hurricane when it made landfall. The hurricane's winds and rising water caused excessive damage to structures along the gulf coast.

Hurricane Katrina also damaged weather stations and water level gauging stations along the Mississippi coast. Therefore, accurate wind and water level data are not available. In order to assist in evaluating damage, FAEC has synthesized data from the Hurricane Forecast Advisories and Hurricane Public Advisories available at noaa.gov, and from a report prepared for State Farm Insurance companies by Weather Data, Inc.

By interpolation, this data shows that at landfall wind speeds reached 115 to 130 miles per hour at Gulfport, Biloxi, Ocean Springs, Gautier, Pascagoula, and other areas east

# FORENSIC ANALYSIS & ENGINEERING CORPORATION

ESTABLISHED 1966 FORENSIC ENGINEERING, PRODUCT DEFECT ANALYSIS & ACCIDENT INVESTIGATIONS

5301 Capital Blvd., Suite A - Raleigh, North Carolina 27616-2956

WEBSITE: WWW.FORENSIC-ANALYSIS.com E-MAIL: FORENSIC @ FORENSIC-ANALYSIS.com Facsimile: (919) 872-8660 (800) 224-3595

Telephone: (919) 872-8788

Nguyen-A Original on-site report



Title: Hurricane age Assessment Investigation Insured: Minh Nguyen

Claim/Policy No.: 24-Z451-170/24-CC-2102-7

FAEC File No.: 530-0091-05-25

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of Gulfport. Winds at this level define a Category 3 storm on the Saffir/Simpson scale, and some structural damage to small residences and utility buildings, damage to roofing material, door and window failures, and a minor amount of curtainwall failures would be expected. The Weather Data, Inc. report indicates maximum winds at this location were approximately 100 to 110 miles per hour.

The Advisories also predicted storm surge and tidal flood levels of 18 to 22 feet, and up to 28 feet depending on local conditions. Considering currents and wave action, FAEC would expect flooding and wave or current damage at elevations up to 32 feet above mean sea level (MSL).

The Advisories also mention the possibility of tornados, and tornado warnings were issued, for the Waveland-Bay St. Louis area northward to Kiln and Diamondhead, however FAEC has not found any documentation or specific evidence that tornados actually occurred in this area.

The subject property appears to be within Flood Zone A9 (EL 12) on the Flood Insurance Rate Map Panel 2852560160D, and available topographic mapping of the area indicates ground elevations at the structure are between 5 and 10 feet above mean sea level (MSL).

FAEC performed a field investigation of the subject residence to determine if wind or tidal surge damaged the residence. Ms. Nguyen was not present for FAEC's inspection; however she was interviewed by phone. The sister of the insured, Ms. Minh Le, was present for the inspection. During our on site examination of the subject damage, FAEC was able to complete our inspection which acts as a basis of this report.

#### SITE OBSERVATIONS

The following are the observations made during FAEC's inspection of the structure:

- This house was located in an area where there was almost complete devastation. The home was oriented so that the front faces east towards Sundown Ave. The house was approximately 200 yards northeast of a bayou leading to the Back Bay of Biloxi, and was demolished.
- The house was a one story structure.
- A neighbor, Mr. Toche, thought a tornado had come through the area as a "swath of destruction" was apparent to him. There appears to be a path of destruction starting at the corner of a street about ¼ mile to the southeast of the insured home then proceeding northeasterly through a steel framed building on a golf course and continuing northeasterly for several hundred yards past the insured home to a point near where a stand of pine trees remain.



Claim/Policy No.: 24-Z451-170/24-CC-2102-7

FAEC File No.: 530-0091-05-25

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- A house slab located three properties to the south of the insured had a number of exterior wall bottom plate anchor bolts remaining in the eastern wall area, and these had been bent in opposing directions.
- In a telephone conversation with Ms. Nguyen, she told of how she escaped from her house during the storm. She and seven others made their way to the north side of the attic. At some point, something that was driven by the wind collapsed the south side of the attic and walls below. Two Vietnamese men witnessed this and told her it was the house to the south of her which flew into the south side of her house. These two men assisted these people to the ground and out to Sundown Ave. Once on Sundown Ave. the people made their way north to Lemoyne Blvd. Ms. Nguyen stated that as she headed north, she looked back and saw entire houses demolished, and the south side of her house demolished. The water level in the street was about 2 ft. at this time, and she recalls that they went into the attic probably about mid morning, possibly about 8 or 9 am. Her daughter received a head injury that required about 30 stitches. The daughter was floated down the street to safety by lying flat on some kind of plywood, readily found, pushed by those people with her.
- Observations of properties in the general area indicate significant damage and there were numerous tree failures in the northwesterly direction.

#### CONCLUSIONS

Based on the information that has been presented to FAEC and evidence gleaned during our inspection, FORENSIC ANALYSIS & ENGINEERING CORPORATION has made the following conclusions concerning the damage to the structure:

- The tree failures in the northwesterly direction are the result of the winds out
  of the southeast from the approaching hurricane. There are signs of possible
  tornado activity in the localized area described above.
- There was wind damage to the structure of some degree, based upon the insured's statement.
- There is evidence of storm surge in the area.

It is the opinion of FAEC that the damage to the house was predominantly caused by wind.

Our stated opinion is also based on our knowledge that the Category-3 hurricane force winds were present in this area for several hours before the rising and wind driven water would have reached the subject home's position, and that the pattern of destruction and damage to steel structures along a linear area is typical of a tornado



Title: Hurricane nage Assessment Investigation Insured: Minh Nguyen

Claim/Policy No.: 24-Z451-170/24-CC-2102-7 FAEC File No.: 530-0091-05-25

Page 4

accompanying the hurricane. Based upon this information, FAEC concludes that the home's structure was severely damaged by the extended hurricane force winds and a probable tornado, then washed away from its foundation by the swath of the surging wind driven waves.

The conclusions and opinions presented in this report are based on the results of FAEC's field investigation of the subject residence, as well as our analysis of the available wind and localized water level data and upon all of the other associated information that we have gathered during the course of our investigation efforts to date. If additional information or facts become available which materially affect these stated conclusions and opinions, then, FAEC reserves the right to amend or change its opinions and conclusions as needed.



Title: Hurricane L ge Assessment Investigation Insured: Minh Nguyen

Claim/Policy No.: 24-Z451-170/24-CC-2102-7

FAEC File No.: 530-0091-05-25

Page 5

It has been our pleasure to perform this structural engineering analysis for you. We trust that our efforts will meet with your approval and that this report meets its intended purpose. Please call if you have any questions concerning this report or if I or any of FORENSIC ANALYSIS & ENGINEERING CORPORATION'S staff can be of further support.

Respectfully submitted, FORENSIC ANALYSIS & ENGINEERING CORPORATION

John B. Kelly, P.E.

Principal Structural Engineer

John B. Helly

As it is the practice of FAEC to emphasize and ensure the technical quality of its work through peer review, the content of this report has been reviewed by the undersigned to ensure that all stated conclusions and supporting facts are technically consistent and meet the requirements of current engineering and scientific principles.

FORENSIC ANALYSIS & ENGINEERING CORPORATION

William C. Forbes, PE, DEE

Senior Principal Engineer

DEC 17 2005

December 16, 2005

FORENSIC

AMALYSIS & E-PSINESPHING CORPORATION

AMALYSIS & E-PSINESPHING CORPORATION

154

State Farm Insurance Ms. Lisa Watcher 1909 East Pass Rd. Gulfport, MS 39507

Re: Hurricane Damage Assessment Investigation

Insured: Minh Nguyen Date of Loss: 8-29-2005

SF Claim No. 24 Z451-170/24-CC-2102-7

FAEC Case No. 530-0091-05-25

Dear Ms. Watcher:

Please allow this letter to address the concerns raised by the client, State Farm Insurance Co. concerning the FAEC conclusions in the above referenced case.

As I observed the site and spoke with the insured I came to the conclusion that wind was the predominant cause of damage to the structure. The rationalization behind this conclusion was based on a number of issues. While it was obvious that the storm surge affected this immediate area, other factors were also considered in the final opinion:

- 1. The insured gave important information in our phone conversation. According to our assignment, we were allowed to give eyewitness accounts certain weight.
- 2. The damage to the area was indicated in photographs. Photograph 3 is of a steel structure estimated to be about 200 yards southeast of the instruct's property. The damage observed to this structure was consistent with damage that could be caused by tornado type winds.
- 3. Photograph 5 is of anchor boles for the bottom plate of an exterior wall. The anchor bolts along this line are generally deflected in opposing directions which could be considered consistent with damage that could be caused by rotating winds.
- 4. The damage to the area seems to stop abruptly at a tree line several hundred yards to the northwest of the insured's properly. Damage beyond that point appears to be greatly diminished. This is consistent with the possibility of tornade type winds.

# FORENSIC ANALYSIS & ENGINEERING CORPORATION ESTABLISHED 1966

FORENSIC ENGINEERING, PRODUCT DEFECT ANALYSIS & ACCIDENT INVESTIGATIONS

5301 Capital Blvd., Suite A - Raleigh, North Carolina 27616-2956
E-MAIL: FORENSIC @ FORENSIC-ANALYSIS.com WEBSITE: WWW FORENSI

Telephone: (919) 872-8788 (800) 224-3595 Facsimile: (919) 872-8788

Nguyen-B Engineer forced to defend his report.

16

Letter to State Farm Insurance Co. December 16, 2005, SF Claim No. 24-Z451-170/24-CC-2102-7

Page 2

Lastly, I would add that based on field observations and statements from the insured, both wind and water must have contributed to the destruction of the house. It was my conclusion that while both wind and water contributed to the destruction of the house, it was predominantly wind that caused the initiating and major damage. This was supported, in my opinion, by those observations further elaborated above.

If you require any additional information, please do not hesitate to contact the firm.

Very truly yours,

John B. Kelley John B. Kelly, P.E.

Principal Structural Engineer

Phone 228+282-4717

Cc: Home Office, Raleigh, NC William C. Forbes, P.E., DEE



. Rimkus Consulting Group, Inc. 198 Charmant Drive, Suite 4 Ridgeland, Mississippi 32502 (601) 898<sup>2</sup>4738 Telephone (601) \$53-8303 Facsimile Certificate of Authorization No. E-00001307

Ms. Kimberly Riley State Farm P O Box 6759 D Iberville, MS 39504

Re: Noncoo

Claim No: 24Z45766

Insured: Beckhan James & Jo Dell

Subject:

Report of Findings.

RCG File No: 5221438

Dear Ms. Riley:

Mr. Beckham reported that his residence was destroyed by Humicarie Katrina on August 29, 2005. The residence was located at 136 Poki Place, Diamondhead, MS. 39525

Rimkus Consulting Group; lac. was retained by Ms. Riley on behalf of State Farm Insurance Company to evaluate the reported damage to the residential structure. We were specifically asked to determine structural damage caused by the hurricane winds versus structural damage caused by the associated storm surge and waves. Mr. Paul N Monie performed our visual inspection of the property on November 8, 2005. Weather data used during our evaluation was obtained from Compu-Weather, Inc. and the National Oceanic and Atmospheric Administration (NOAA).

# QZ45 CONCLUSIONS

The following conclutions were made affectour site visit and a review of the field notes and photographs. Our opinions are as follows:

- Hurricane Katrina demolished the superstructure of the residence, such that only concrete slab-on-grade and some CMU columns of the home were left.
- 2. High wind forces and flooding/wave forces from hurricane Katrina were both of sufficient magnitude to cause structural damage to the building. र देकाराङ्ग अस्ति विवासकते । १५ १ ।
- 3.. There was insufficient physical evidence to determine the proportion of wind versus storm surge that destroyed the residence. gio tous stations by a

**EXHIBIT** "B"

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Original on-site report.

September 12, 2006 RCG File No. 5221438

Page 2

### MERODUCTION

The residence was reportedly a troc sory, wood-framed structure supported on concrete slab-on-grade foundation system. We were told by the insured that the exterior walls were covered facility until structor and a small potion of vinyl sidings and the roof was covered with architectural syntoles. The insured Mr. Beckhain was present during our inspection. For the purpose for this report, the front of the residence was referenced to face south.

Humicane Katrina was one of the structure structure supported on concrete slab-on-grade forms and entering the Gulf of States during the last 100 years was referenced. Sputh Florida and entering the Gulf of

States during the last 100 years in Sputh Florida and entering the Gulf of Mexico Katrina began to strengthen reaching rategory 5 strength humicane and on August 28, 2005, about 250 miles sputh spatheast of the mouth of the Mississippi River Katrina's winds reached their peak intensity of 175 mph winds and the pressure fell to 902 mb. A STATE OF

According to published weather data, the highest wind gusts measured along the Mississippi coast on August 29, 2005, were 90 mph at a Keesler AFB in Biloxi, 63 mph in Gulfport, and 50 mph at Pascagoula. Winds as high as 125 mph likely occurred near occurred near the point of landfall near the Louisiana/Mississippi border, and winds likely in excess of 100 mph accurred along the entire Mississippi coast. Preliminary data from NOAA estimated winds in the Diarbondhead area to be 100 to 130 mph...

Following the wind forces, a storm sugge from the humicane produced wide-spread flooding. Along the Mississippi coast the were reported storm surges of 11.27 feet at Green Pass, 12.16 feet at Rascagoùla 20 feet at the Biloxi River at Wortham, and a report of 30 feet above seallevel avidance keep.

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During the course of our site visit, we observed the following:

- The insured was presented utilities of the insured was presented the property to us. He said that his residence was advice story building with 3500 SF living area and 4000 SF under the root the showed us where his household items were found approximately 350 feet west from the residence across the bayou (water). He said his roof was not found after the hurricane, that he believes the wind had blown his roof to an unknewn destination. (Photograph 1, 2, 8 & 9).
- The trees at the backcopythe residence had scours measuring 30 feet from natural ground to the top of the scours. Some of the tree limbs and the upper potion were snapped notificapproximately 40 feet above natural ground (Photograph 5 & 7) is declined along it is
- The residence was completely demolished with only the concrete slab-on-grade
- and damaged CMU columns left (Photograph 2).

  There was a 6 feet and 8 feet concrete slab at the front and back of the main slab. The owner reported that these slabs were for the front and back porch respectively. respectively. Hollar Parioson.

September 12, 2006 RCG File No. 5221438 Page 3

- The majority of the cleans and destroyed parts of residence was lying on the north-west corner (Photograph 3).

  There was a concrete driveway at the front of the residence. (Photograph 1).

  The residence CMU columns livere demolished and some of them leaning in variable direction on the columns livere demolished and some of them leaning in variable direction on the columns lead on grade. The square columns measured 8 feet height above the columns lead in the stab was measured to be approximately 31 feet x 63 feet with the long side in the east-west direction of the residence. (Photograph 4).

  The insured reported that his critical ceramic tile counter top, a 25 feet piece iron rod, part of his office floor takening and lavatory pedestal that was all on the second floor were found across two canals approximately 450 feet west from the residence.

## ANA ANALYSIS

Weather data showed that wind speeds in the Diamondhead region were approximately 118-to155 mph; and that storm surge of approximately 25-feet occurred. Since the wind forces of Hurricane Kathina were estimated in the range of 155 mph, we cannot rule out that lateral forces from wind loads exceeded the residential structural design. The lateral pressure from wave action typically exceeds wind loads. A 130 mph wind will produce a lateral pressure of rapproximately 43 psf whereas a 4-foot height of water will produce a making in hydrostatic pressure of over 200 psf, not including dynamic lateral forces from wave action. white do not

The conditions stated above supportations stated above supportation stated above supportations stated above supportations stated above supportation stated stat by storm surge resulting from the passage of Humicane Katrina. Flood water from the storm surge entered the residence cansing damaged to the entire residence. - Aldrews & B. Ch.

This report was prepared for the exclusive use of State Farm Insurance Company, and was not intended for any other purpose Company was based on information made available to us at the time. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions, and to revise our opinions and conclusions if necessary and warranted. Photographs taken during our work are retained in our files and are available to you upon request. This report was prepared for our client's use, and we disavow any liability for use by others with the second

Thank you for allowing us:to provide this service if you have any questions or need additional assistance, please calls from wind large and

Sincerely.

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RIMKUS CONSULTING GROUP INC oct.

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Case 1:06-cv-00247-LTS-RHW 2013 Filed 09/26/2006 Page 4 of 8

September 12, 2006 RCG File No. 5221433

Page 4

Paul N Monie Consultant Corey D. Green, P.E. MS Reg. Eng. No. Number Senior Consultant

Attachments: Photographs

# State Farm Insurance Companies®



February 1, 2006

State Farm Catastrophe Office PO Box 6759 D'Iberville, MS 39540-6759

JAMES O BECKHAM SR JO DELL BECKHAM PO BOX 6231 DIAMONDHEAD MS 39525

RE: Claim Number:

24-Z457-665

Policy Number:

24-CG-3522-8

Location of

Insured Property:

136 Poki Place

Diamondhead, MS 39525

Date of Loss:

August 29, 2005

Policy Type:

Homeowners, FP-7955

Dear Mr. and Mrs. Beckham:

This letter is a follow-up to your meeting with Claim Representative Kimberly Riley on November 7, 2006, where she discussed and inspected the damage to your property.

Based upon the results of the discussion, site inspection, and investigation, it has been determined the damage to your property at 136 Poki Place, Diamondhead, Mississippi, was caused by flooding/rising water/tidal surge.

Enclosed please find a copy of the report by the Rimkus Consulting Group, Inc.

Damage resulting from this cause of loss is not covered by your policy. Please refer to the following provisions:

#### **SECTION I - LOSSES NOT INSURED**

- 2. We do not insure under any coverage for any loss which would not have occurred in the absence of one or more of the following excluded events. We do not insure for such loss regardless of: (a) the cause of the excluded event; or (b) other causes of the loss; or (c) whether other causes acted concurrently or in any sequence with the excluded event to produce the loss; or (d) whether the event occurs suddenly or gradually, involves isolated or widespread damage, arises from natural or external forces, or occurs as a result of any combination of these:
  - Water Damage, meaning:

Beckham-B Denial letter with revised report. 22

JAMES O BECKHAM SR JO DELL BECKHAM 24-Z457-665 Page 2 February 1, 2006

- (1) flood, surface water, waves, tidal water, tsunami, seiche, overflow of a body of water, or spray from any of these, all whether driven by wind or not;
- (2) water or sewage from outside the **residence premises** plumbing system that enters through sewers or drains, or water which enters into and overflows from within a sump pump, sump pump well or any other system designed to remove subsurface water which is drained from the foundation area; or
- (3) water below the surface of the ground, including water which exerts pressure on, or seeps or leaks through a building, sidewalk, driveway, foundation, swimming pool or other structure.

Please be advised that as of February 15, 2006, all additional living expenses payment will cease. Please forward all information regarding additional living expenses to the address listed above.

This Company does not intend, by this letter, to waive any policy defenses in addition to those stated above, and reserves its right to assert such additional policy defenses at any time.

If you have any additional information regarding your claim which has not been previously considered, or if you desire any additional explanation regarding this matter, please contact Claim Representative Kimberly Riley at 866 787 8676 ext 5366.

Sincerely,

Lansing Clark Vargo Team Manager

228 396 **7938** 

State Farm Fire and Casualty Company

09/825/0201011

cc: 24-1429 Agent Mike Meyers



Rimkus Consulting Group, Inc. 198 Charmant Drive, Suite 4 Ridgeland, Mississippi 32502 (601) 898-4738 Telephone (601) 853-8303 Facsimile Certificate of Authorization No. E-00001307

Ms. Kimberly Riley State Farm P. O. Box 6759 D'Iberville, MS 39504

Re:

Claim No: 247457665

Insured: Beckham James & Jo Dell

Subject: Report of Findings

RCG File No: 5221438

Dear Ms. Riley:

Mr. Beckham reported that his residence was destroyed by Hurricane Katrina on August 29, 2005. The residence was located at 136 Poki Place in Diamondhead, Mississippi.

Rimkus Consulting Group, Inc. was retained by Ms. Riley on behalf of State Farm Insurance Company to evaluate the reported damage to the residential structure. We were specifically asked to determine structural damage caused by the hurricane winds versus structural damage caused by the associated storm surge and waves. Mr. Paul N. Monie performed our visual inspection of the property on November 8, 2005. Weather data used during our evaluation was obtained from Compu-Weather, Inc. and the National Oceanic and Atmospheric Administration (NOAA).

#### CONCLUSIONS

The following conclutions were made after our site visit and a review of the field notes and photographs. Our opinions are as follows:

- Storm Surge from hurricane Katrina destroyed the residential building.
- The wind forces of Hurricane Katrina were of a sufficient magnitude to potentially cause damage to the roof coverings, soffit, fascia and siding of the residence. While this type of damage was not observed on this residence or any dwellings in the area, wind speeds similar to the wind speeds at Diamondhead have caused damage to nonstructural elements.

#### INTRODUCTION

The residence was reportedly a two-story, wood-framed structure supported on concrete slab-on-grade foundation system. We were told by the insured that the exterior walls were covered mostly with stucco and a small potion of vinyl siding. The roof was covered with asphalt composition architectural shingles. The insured, Mr. Beckham, was present during our inspection. For the purposes of this report, the front of the residence was referenced to face south.

Hurricane Katrina was one of the strongest storms to impact the coast of the United States during the last 100 years. After crossing South Florida and entering the Gulf of Mexico Katrina began to strengthen reaching category five strength hurricane and on August 28, 2005, about 250 miles south-southeast of the mouth of the Mississippi River Katrina's winds reached their peak intensity of 175 miles per hour (mph) winds and the pressure fell to 902 mb.

According to published weather data, the highest wind gusts measured along the Mississippi coast on August 29, 2005, were 90 mph at a Keesler AFB in Biloxi, 63 mph in Gulfport, and 50 mph at Pascagoula. Winds as high as 125 mph likely occurred near the point of landfall near the Louisiana/Mississippi border, and winds likely in excess of 100 mph occurred along the entire Mississippi coast. Weather data published by Compuweather data identified the maximum sustained winds in the Diamondhead area to be 110 to 120 mph.

A storm surge from the hurricane produced wide-spread flooding. Along the Mississippi coast, there were reported storm surges of 11.27 feet at Green Pass, 12.16 feet at Pascagoula, 26 feet at the Biloxi River at Wortham, and a report of 30 feet above sea level at Hancock County. Weather data published by Compuweather data identified the storm surge height in the Diamondhead area to be over 25 feet.

#### **OBSERVATIONS**

During the course of our site visit, we observed the following:

- The insured was present during our inspection and described his property to us. He said that his residence was a two story building with 3500 SF living area and 4000 SF under the roof. He showed us where his household items were found approximately 350 feet west from the residence across the bayou (water). He said his roof was not found after the hurricane and he believed the wind had blown his roof to an unknown destination. (Photograph 1, 2, 8 & 9).
- The trees at the back of the residence had scours measuring 30 feet from natural ground to the top of the scours. Some of the tree limbs and the upper potion were snapped off approximately 40 feet above natural ground (Photograph 5 & 7).
- The residence was completely demolished with only the concrete slab-on-grade and damaged CMU columns left (Photograph 2).

- There was a 6 feet and 8 feet concrete slab at the front and back of the main slab. The owner reported that these slabs were for the front and back porch respectively.
- The majority of the debris and destroyed parts of residence was relocated to the north-west (**Photograph 3**).
- There was a concrete driveway at the front of the residence. (Photograph 1).
- The CMU columns of the residence were missing or damaged. Some of the some of columns were listing and others were lying on the concrete slab-ongrade. The columns had moved in all directions. The columns were measured to be 8 feet above the concrete slab. The slab was measured to be approximately 31 feet x 63 feet, with the long side in the east-west direction of the residence. (Photograph 4 & 6).
- The insured reported that his kitchen ceramic tile counter top, a 25 feet piece iron rod, part of his office floor covering and lavatory pedestal, which were all on the second floor, were found across two canals approximately 450 feet west of the site.
- All of the neighboring structures were destroyed.

#### **ANALYSIS**

The lateral pressure from wave action typically exceeds wind loads. A 120 mph wind will produce a lateral pressure of approximately 37 psf whereas an 8-foot height of water will produce a maximum hydrostatic pressure of over 400 psf at the base, not including dynamic lateral forces from wave action.

The conditions stated above support the conclusion that the residence was destroyed by storm surge of Hurricane Katrina. Due to the fact that none of the neighboring structures remained, and scours found on trees caused by surge in the area, it is obvious that the structure was destroyed by storm surge accompanying Hurricane Katrina.

The wind forces of Hurricane Katrina were of a sufficient magnitude to potentially cause damage to the roof coverings, soffit, fascia and siding of the residence. These non-structural elements are susceptible to wind damage. While this type of damage was not observed on this residence or any dwellings in the area, wind speeds similar to the wind speeds at Diamondhead have caused damage to nonstructural elements.

This report was prepared for the exclusive use of State Farm Insurance Company. and was not intended for any other purpose. Our report was based on information made available to us at the time. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions, and to revise our opinions and conclusions if necessary and warranted. Photographs taken during our work are retained in our files and are available to you upon request. This report was prepared for our client's use, and we disavow any liability for use by others.

Thank you for allowing us to provide this service. If you have any questions or need additional assistance, please call.

Sincerely,

RIMKUS CONSULTING GROUP, INC.

Paul N. Monie Consultant

Attachments: Photographs/Resume

Lawrence L. Wedderstrand, P.E.

MS Reg. Eng. No. 16732

Consultant



Rimkus Consulting Group, Inc. 198 Charmant Drive, Sulte 4 Ridgeland, Mississippi 32502 (601) 898-4738 Telephone (601) 853-8303 Facsimile Certificate of Authorization No. E-00001307

December 20, 2005

CGI Insurance Company-Littleton Group 8019 North Himes Avenue — Suite 310 Tampa FL 33614

Attention: Joseph Kahlert

Re:

Claim No: 2005-002-288

Insured: James O. "Buddy" Ray

Subject: Report of Findings

RCG File No: 5221647

Dear Mr. Joseph Kahlert

Mr. James Ray reported that his single family dwelling was destroyed by Hurricane Katrina on August 29, 2005. The single family dwelling was located at 470 Beach Blvd. in Long Beach MS 39560; right on the beach at Trautman Avenue.

Rimkus Consulting Group, Inc. was retained by yourself, Mr. Joseph Kahlert on behalf of CGI Insurance Company. We were specifically asked to determine wind vs storm surge. Mr. James Overstreet P.E. performed our visual inspection of the property on Saturday December 2nd<sup>th</sup>, 2005. Mr. Ray was present for the inspection. A phone contact was made to CGI as well. Weather data used during our evaluation was obtained; included data from Compu-Weather, Inc. and the National Oceanic and Atmospheric Administration (NOAA). Several eyewitness reports will be referenced in this report. Additionally, a reference to NOAA-Hurricane Basics will be made as well.

#### CONCLUSIONS

The following conclusions were made after our site visit and a review of the field notes and photographs. Our opinions are as follows :

 The home had been destroyed by a combination of Wind Gusts, Tornadoes, and Wind Driven Storm Surge. Tornadoes are referred to in NOAA-Hurricane Basics.

Ray-A Qn-site Engineering Report

- Due to the high incidence of snapped and uprooted trees, and according to eye witness accounts, winds much higher than those considered to be "sustained" likely contributed to the structural damage to Mr. Ray's home.
- 3. Wind Driven Storm Surge was a major factor in the destruction of the home.

#### INTRODUCTION

Hurricane Katrina was one of the strongest storms to impact the coast of the United States during the last 100 years. After crossing South Florida and entering the Gulf of Mexico Katrina began to strengthen reaching category 5 strength hurricane and on August 28, 2005, about 250 miles south-southeast of the mouth of the Mississippi River Katrina's winds reached their peak intensity of 175 mph winds and the pressure fell to 902 mb.

According to published weather data, the highest wind gusts measured along the Mississippi coast on August 29, 2005, were 90 mph at a Keesler AFB in Biloxi, 63 mph in Gulfport, and 50 mph at Pascagoula. Winds as high as 125 mph likely occurred near the point of landfall near the Louisiana/Mississippi border, and winds likely in excess of 100 mph occurred along the entire Mississippi coast. Preliminary data from NOAA estimated winds in the Gulfport area to be 100 to 130 mph.

Following the wind forces, a storm surge from the hurricane produced wide-spread damage from water forces and water contamination. Along the Mississippi coast, there were reported storm surges of 11.27 feet at Green Pass, 12.16 feet at Pascagoula, 26 feet at the Biloxi River at Wortham, and a report of 30 feet above sea level at many places in Hancock County.

#### **OBSERVATIONS**

Description of property: The residence was reported to be a 1-story wood frame dwelling. The foundation was an elevated chain wall slab approximately 16 feet above sea level. The exterior walls were covered with brick and stucco. The roof was reportedly of metal. For purposes of this report, the front of the residence was reported to face South.

During the course of our site visit, we observed the following:

- Nothing remained of the home except the steps on the front/south side, and on the west side. A photograph presented to me at the time showed the stairs and brick chain wall remaining after the storm. Also presented was a photo of the home prior to the storm.
- Mr. Buddy Ray and Eye Witness A.J. Viviano (See Photo 4) posed on the west steps. Mr. Viviano is reported to have stayed in his home during the storm and

witnessed both his home and his neighbor's homes destroyed completely by wind prior to the storm surge. (See Photo/Exhibit 10)

- Other Eyewitness accounts include those from Henry Savage (neighbor), Barbara Duncan (neighbor), Tommy Moulton, and Debra Hester. See the Statements. (Photo/Exhibits 7, 8, 9, 15, and 16)
- Mr. Ray reported that a lot of the debris from his house was found well to the
  west of his home, namely parts of the metal roof, parts of the tanning bed, and
  stucco columns.
- Looking at a photo (See Photo 3) presented to me by Mr. Ray taken after the storm on 8/29 and before my inspection on 12/2; Probably in the 10/25 time frame, the chain wall supporting the foundation, is still present. This indicates the possibility that the slab may have been usable, prior to being demolished and removed.
- According to Mr. Ray and his neighbors, there is a path of increased destruction evidenced by snapped, twisted, and uprooted trees. In this path of increased wind destruction, includes the home of A.J. Viviano and the home of Mr. Buddy Ray. This destruction path is shown on a map ( See Photo/Exhibit 6 ).
- Good watermarks were hard to come by with the advent of the cleanup endeavors initiated by the City of Long Beach MS, FEMA, Core of Engr's, etc....

#### ANALYSIS

There were a large number of snapped and uprooted trees in the immediate neighborhood of where Mr. Ray's home was situated. This indicating a present of winds much higher than those considered to be "sustained". Eyewitness A.J. Viviano reported that the wind that took his roof off, roared like a tornado for a good period of time prior to impacting his house. Tornadoes are referred to in a document known as NOAA-Hurricane Basics. On pages 12, and 14 of this document, Tornadoes spawned from a Hurricane are considered as being a major cause of wind damage.

Several other neighbors also reported major structural damage being caused by wind; Hamely Henry Savage, and Barbara Duncan. See statements 7,8,9,15,16 below.

Due to the fact that major wind occurred prior to the storm surge, it can be concluded that as much as 50% of the damage was due to wind alone. With the presence of several eyewitnesses, it is possible to conclude that the dwelling was seriously structurally compromised prior to the storm surge due to wind forces, to the extent of being considered a total loss.

### RCG File No. 5221647 - Ray

A typical storm surge level would have been 25 feet above sea level. With Mr. Rays slab being at 16 feet above sea level, this would have placed 9 feet of water in Mr. And Mrs. Rays home. This would certainly account for a percentage of the overall damage.

By looking at the photos of the front of the house, it is clear that demolition crews removed the slab and chain wall. (See Photos 2, 3, and 5). The possibility that this demolition crew demolished a usable slab presents itself.

This report was prepared for the exclusive use of CGI Insurance Company, and was not intended for any other purpose. Our report was based on information made available to us at the time. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions, and to revise our opinions and conclusions if necessary and warranted. Photographs taken during our work are retained in our files and are available to you upon request. This report was prepared for our client's use, and we disavow any liability for use by others.

Thank you for allowing us to provide this service. If you have any questions or need additional assistance, please call.

Sincerely,

RIMKUS CONSULTING GROUP, INC.

James Overstreet P.E. Consultant

Corey D. Green P.E. MS Reg. Eng. No. 14873 Senior Consultant

Attachments: Photographs ( Ref. 4592-4649 )



Rimkus Consulting Group, Inc. 198 Charmant Drive, Suite 4 Ridgeland, Mississippi 39157 (601) 898-4738 Telephone (601) 853-8303 Facsimile Certificate of Authorization No. E-00001307

February 3, 2006

Mr. Joseph Kahlert CGI Insurance Company 4350 W. Cypress Street, Suite 225 Tampa Florida 33607

Re:

Claim No:

2005002288

Insured:

James O. Ray

Subject:

Report of Findings

RCG File No: 5221647

Dear Mr. Kahlert:

Mr. Ray reported that his residence was structurally damaged by Hurricane Katrina on August 29, 2005. The residence was located at 470 W. Beach Boulevard in Long Beach, Mississippi.

Rimkus Consulting Group, Inc. was retained by Mr. Joseph Kahlert on behalf of CGI Insurance Company. We were specifically asked to determine the cause of the damage due to the hurricane winds versus the associated storm surge and the waves. Mr. James Overstreet, under the direction of Mr. Thomas E. Heifner, P.E., performed our visual inspection of the property on December 2, 2005. Mr. Ray was present for the inspection and provided information. The weather data used during our evaluation was obtained from Compu-Weather, Inc. and the National Oceanic and Atmospheric Administration (NOAA).

#### CONCLUSIONS

The following conclusions were made after our site visit and a review of the field notes and the photographs. Our opinions are as follows:

- 1. The storm surge associated with Hurricane Katrina destroyed the portion of the residence above the concrete foundation slab.
- 2. We cannot rule out the possibility that the high winds damaged the non-structural components prior to the destruction by the storm surge.

Revised Engineering Report Revised at Rimkus office Kay-B

#### INTRODUCTION

Hurricane Katrina was one of the strongest storms to impact the coast of the United States during the last 100 years. After crossing the Florida peninsula and entering the Gulf of Mexico, Hurricane Katrina strengthened to a Category 5 hurricane as defined by the Saffir-Simpson scale. On August 28, 2005, approximately 250 miles south-southeast of the mouth of the Mississippi River, Hurricane Katrina's winds reached their peak intensity of 175 mph and the atmospheric pressure fell to 902 millibars.

According to the published weather data, the highest wind gusts measured along the Misssissippi gulf coast on August 29, 2005 were a 90 mph gust at Keesler Air Force Base in Biloxi; a 63 mph gust at Gulfport-Biloxi Regional Airport in Gulfport; and a 50 mph gust at Naval Station Pascagoula. Winds as high as 125 mph likely occurred near the point of the hurricane's landfall at the Louisiana-Mississippi border.

Along the Mississippi gulf coast, there were reported storm surges of 11.3 feet at Green Pass; 12.1 feet at Pascagoula; and 26.0 feet on the Biloxi River at Wortham, and reports of 30.0 feet in Hancock County.

#### **OBSERVATIONS**

The residence was a single story, wood-framed structure constructed on an elevated concrete slab supported on fill material and a perimeter wall. The exterior walls were covered with brick and stucco veneers. The roof framing was covered with metal panels. For purposes of this report, the front of the residence was reference to face south.

Mr. Ray reported that the debris from his residence was found well to the west of his property. Namely parts of the metal roof, parts of the tanning bed, and stucco columns. Mr. Ray presented photographs taken before the storm (**Photograph 1**) and after the storm (**Photograph 2**). In the photograph taken after the storm, it is evident that only the perimeter foundation wall and concrete slab remained. The residence was demolished by the city of Long Beach between the time the photograph was taken and by the time of our inspection.

During the course of our site visit, we observed the following:

- We observed that the southern elevation of the residence faced the Gulf of Mexico and was approximately 100 yards from the beach.
- We observed that nothing remained of the residence except the steps on the southern side, and on the western side of the structure.
- We observed that there were many broken, twisted, and uprooted trees in the area (Photographs 4, 5 & 6).

- Heavy debris was deposited north of the footprint of the house (Photograph 8).
- Trees in the area had scrape marks and impact damage on the bark (Photograph 5).

#### **ANALYSIS**

The weather data showed that the wind speeds in the Long Beach region were approximately 110 mph to 120 mph, and that a storm surge of 11-feet to 30-feet occurred. The lateral pressure from wave action typically exceeds wind loads, not including dynamic lateral forces from the wave action.

The residence was destroyed as a result of the storm surge. The proximity of the residence to the Gulf of Mexico combined with the reported storm surge for the area indicated that the residence was likely destroyed by the application of the high lateral pressures of the storm surge and the associated wave action that occurred this close to the Gulf of Mexico.

Additionally, wind speeds reportedly exceeded 100 mph, and we cannot rule out that damage from the wind caused limited damage to the non-structural building components such as the roof coverings, siding or the awnings. However, the significant damage to the structure resulted from the storm surge.

This report was prepared for the exclusive use of CGI Insurance Company, and was not intended for any other purpose. Our report was based on information made available to us at the time of our inspection. Should additional information become available, we reserve the right to determine the impact, if any, the new information may have on our opinions and conclusions and to revise our opinions and conclusions if necessary and warranted. Photographs taken during our work are retained in our files and are available to you upon request.

If you have any questions or need additional assistance, please call.

Sincerely,

RIMKUS CONSULTING GROUP, INC.

James Overstreet C

Consultant

Attachments: Photographs

Thomas E. Heifner, F.E. Mississippi Reg. Eng. No

Senior Consultant